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|                 |             |                      |                     |
|-----------------|-------------|----------------------|---------------------|
| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. |
|-----------------|-------------|----------------------|---------------------|

09/587,092 05/31/00 HOFFMAN

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TM02/0606

EXAMINER

KANOF, P

ART UNIT

PAPER NUMBER

2164

DATE MAILED:

06/06/01

**Please find below and/or attached an Office communication concerning this application or proceeding.**

**Commissioner of Patents and Trademarks**

# Office Action Summary

Application No.  
09/587,092

Applicant(s)  
Hoffman

Examiner  
KANOF

Art Unit  
2164



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE three MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on May 31, 2000
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above, claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claims \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. § 119

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- a) ☐ All b) ☐ Some\* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \*See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

## Attachment(s)

- 15) ☒ Notice of References Cited (PTO-892) 18) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 16) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 19) ☐ Notice of Informal Patent Application (PTO-152)
- 17) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s): 4 and 5 20) ☐ Other:

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## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371© of this title before the invention thereof by the applicant for patent.

2. Claims 1-3, 5-7, 12-14, and 16-18 are rejected under 35 U.S.C. 102(e) as being anticipated by Heinonen et al. (U.S. Patent No. 5,887,266).

Claim 1: Heinonen discloses a smart card loading system for loading value over a telecommunications network onto a smart card (Col. 1, lines 38-42 and col. 2, lines 22-42), the smart card loading system comprising:

a mobile telephone handset in communication with said telecommunications network, the handset including a card reader for communicating with a smart card arranged to be inserted in said handset, and an input interface for indicating a value to be loaded onto said smart card, said handset being arranged to generate a request message to load the value onto the smart card (Col. 1, lines 10-25 and col. 2, lines 50-55);

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a gateway computer arranged to receive said request message from said handset over said telecommunications network and to retransmit said request message (Col. 1, lines 42-45 and col. 3, lines 61-64);

a funds issuer computer arranged to receive the request message and to debit a consumer account associated with the smart card (Col. 3, lines 31-36 and 44-56); and

an authentication computer arranged to receive said request message (sends and receive info..., Col. 10, lines 27-37 and 61-65) and to authenticate said smart card, whereby said smart card may be authorized to load (Col. 1, lines 49-56) the value (Col. 8, lines 36-40 and 52-64, and col. 1, lines 53-57).

Claim 2: Heinonen discloses a smart card (Col. 1, lines 38-42 and col. 2, lines 22-42) loading system as recited in claim 1 wherein the telecommunications network is a wireless network (Col. 1, lines 38-41 and col. 12, lines 22-36).

Claim 3: Heinonen discloses a smart card (Col. 1, lines 38-42 and col. 2, lines 22-42) loading system as recited in claim 2 wherein said request message is integrated with the Short Message Service (SMS) channel of the telecommunications network (Col. 8, lines 12-42, col. 9, lines 50-64 and col. 1, lines 49-56).

Claim 5: Heinonen discloses a smart card (Col. 1, lines 38-42 and col. 2, lines 22-42) loading system for loading value over a telecommunications network onto a smart card, said smart card loading system comprising:

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a mobile telephone handset in communication with said telecommunications network, said handset including a card reader for communicating with a smart card arranged to be inserted in said handset, and an input interface for indicating a value to be loaded onto the smart card, the handset being arranged to generate a funds request message which includes an authorization request certificate (Col. 1, lines 10-25 and col. 2, lines 50-55);

a gateway computer arranged to receive said funds request message from said handset over said telecommunications network and to retransmit said funds request message (Col. 1, lines 42-45 and col. 3, lines 61-64);

a funds issuer computer arranged to receive said funds request message, to authenticate said smart card using said authorization request certificate (Col. 3, lines 31-36 and 44-56), and to generate an authentication response certificate for delivery to the smart card, whereby the smart card may validate the authorization request certificate and load (Col. 1, lines 49-56) the value (Col. 8, lines 36-40 and 52-64, and col. 1, lines 53-57).

Claim 6: Heinonen discloses a smart card loading system as recited in claim 5 wherein the telecommunications network is a wireless network (Col. 1, lines 38-41 and col. 12, lines 22-36).

Claim 7: Heinonen discloses a smart card loading system as recited in claim 6 wherein said funds request message is integrated with the Short Message Service (SMS) channel of the telecommunications network (Col. 8, lines 12-42, col. 9, lines 50-64 and col. 1, lines 49-56).

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Claim 12: Heinonen discloses a method of loading (Col. 1, lines 49-56) value over a telecommunications network onto a smart card (Col. 1, lines 38-42 and col. 2, lines 22-42), the method comprising:

receiving at a mobile telephone handset a request from a user to load a value into a stored-value application of the smart card inserted in the handset (Col. 1, lines 10-25 and col. 2, lines 50-55);

opening a second application on the smart card capable of funding the stored value application (Col. 1, lines 42-45);

generating a funds request message which includes the value and an authorization certificate (Col. 3, lines 61-64);

sending the funds request message over said telecommunications network to a funds issuer computer arranged to authenticate said second application and to generate an authentication response certificate (Col. 8, lines 46-49);

receiving a response message which includes the authentication response certificate; validating the authentication response certificate (Col. 3, lines 31-36 and 44-56); and

loading the value onto the stored-value application of said smart card from the second application (Col. 1, lines 49-56, Col. 8, lines 36-40 and 52-64, and col. 1, lines 53-57)..

Claim 13: Heinonen discloses a method as recited in claim 12 wherein the telecommunications network is a wireless network (Col. 1, lines 38-41 and col. 12, lines 22-36)..

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Claim 14: Heinonen discloses a method as recited in claim 13 wherein said messages are integrated with the Short Message Service (SMS) channel of said telecommunications network (Col. 8, lines 12-42, col. 9, lines 50-64 and col. 1, lines 49-56).

Claim 16: Heinonen discloses a purchasing system for purchasing an item over a telecommunications network, the purchasing system comprising:

the telecommunications network for providing communication between entities; with a mobile telephone handset in communication with said telecommunications network, the handset including a card reader for communicating with a smart card (Col. 1, lines 38-42 and col. 2, lines 22-42) arranged to be inserted in the handset, and an input interface, the handset arranged to generate an order request message (Col. 1, lines 42-45 and col. 3, lines 61-64);

a merchant server computer arranged to receive said order request message and to generate a purchase instruction message intended for the handset (MCU, figure 1);

a payment server computer arranged to receive a draw request message from the handset, to generate a debit message intended for the smart card, and to confirm payment by the smart card to said merchant server computer, whereby the item is purchased over the telecommunications network and may be released to a user associated with the smart card (system for making payments, Abstract).

Claim 17: Heinonen discloses a smart card loading system as recited in claim 16 wherein the telecommunications network is a wireless network (Col. 1, lines 38-41 and col. 12, lines 22-36).

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Claim 18: Heinonen discloses a smart card loading system as recited in claim 17 wherein said messages are integrated with the Short Message Service (SMS) channel of said telecommunications network (Col. 8, lines 12-42, col. 9, lines 50-64 and col. 1, lines 49-56).

*Claim Rejections - 35 USC § 103*

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 8 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Heinonen et al. (U.S. Patent No. 5,887,266).

Claim 8: Heinonen discloses smart card loading system as recited in claim 5. However Heinonen does not explicitly disclose wherein in response to a successful load, the handset is arranged to generate a transaction certificate to be used for irrepudiation. Official Notice is taken that is old and well know within the payment arts that in response to a successful load, the handset is arranged to generate a transaction certificate to be used for irrepudiation. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to generate a transaction certificate to be used for irrepudiation. One would have been motivated to use such step in order to prevent contention on the use of the system.



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Claim 15: Heinonen discloses a method as recited in claim 12. However Heinonen does not explicitly disclose generating a transaction certificate to be used for irrepudiation. Official Notice is taken that is old and well know within the payment arts generate a transaction certificate to be used for irrepudiation. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to generate a transaction certificate to be used for irrepudiation. One would have been motivated to use such step in order to prevent contention on the use of the system.

5. Claims 4, 9-11, and 19-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Heinonen et al. (U.S. Patent No. 5,887,266). and further in view of Jonstromer (WO 96/32700).

Claim 4: Heinonen discloses a smart card loading system as recited in claim 1. However, Heinonen does nor explicitly disclose wherein the authentication computer authenticates the smart card using a first cryptographic signature and generates a second cryptographic signature to authenticate a load response, whereby the transaction is secured. Jonstromer discloses such steps (Page 1, line 24-page 2, line 8, page 8, lines 25-32, page 13, line 31-page 14, line 9, and page 16, line 13-page 17, line 22). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to authenticate the smart card using a first cryptographic signature and generates a second cryptographic signature to authenticate a load response. One would have been motivated to use such steps in order to increase the system security.

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Claim 9: Heinonen discloses a method of loading value over a telecommunications network onto a smart card (Col. 1, lines 38-42 and col. 2, lines 22-42), the method comprising:

receiving at a mobile telephone handset a request from a user to load a value onto the smart card inserted in said handset; generating a funds request message which includes said value;

sending said funds request message over said telecommunications network to a funds issuer computer arranged to debit an account associated with said user; generating a load request message (Col. 1, lines 10-25 and col. 2, lines 50-55);

sending said load request message over said telecommunications network to an authentication computer arranged to authenticate said smart card (Col. 1, lines 49-56); and

approval to load; and loading said value onto said smart card (Col. 1, lines 49-56).

Heinonen does not explicitly disclose including a first cryptographic signature, receiving a response message which includes a second cryptographic signature; validating the second cryptographic signature. Jonstromer discloses such steps (Page 1, line 24-page 2, line 8, page 8, lines 25-32, page 13, line 31-page 14, line 9, and page 16, line 13-page 17, line 22). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to include those steps in the Heinonen's system. One would have been motivated to use such steps in order to increase the system security.

Claim 10: Heinonen and Jonstromer disclose a method as recited in claim 9. Further, Heinonen also discloses wherein the telecommunications network is a wireless network (Col. 1, lines 38-41 and col. 12, lines 22-36).

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Claim 11: Heinonen and Jonstromer disclose a method as recited in claim 10. Further, Heinonen also discloses wherein the messages are integrated with the Short Message Service (SMS) channel of the telecommunications network (Col. 8, lines 12-42, col. 9, lines 50-64 and col. 1, lines 49-56).

Claim 19: Heinonen discloses a method of purchasing (...in a shop..., col. 3 , lines 25-33) an item over a telecommunications network using a mobile telephone handset (Col. 1, lines 10-25 and col. 2, lines 50-55); the method comprising:

    sending an order request message to a merchant server computer; and receiving a purchase instruction message from the merchant server computer; processing said purchase instruction message locally (sends and receive info..., Col. 10, lines 27-37 and 61-65);

    sending a draw request message over said telecommunications network to a payment server computer; and debiting the smart card, whereby said item may be released to a user associated with th smart card. (Col. 3, lines 31-36 and 44-56).

Heinonen does nor explicitly disclose receiving a debit message which includes a first cryptographic signature and an approval to debit said smart card; and validating said first cryptographic signature.. Jonstromer discloses such steps (Page 1, line 24-page 2, line 8, page 8, lines 25-32, page 13, line 31-page 14, line 9, and page 16, line 13-page 17, line 22). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to include such steps in the Heinonen's invention. One would have been motivated to use such steps in order to increase the system security.

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Claim 20: Heinonen and Jonstromer disclose a method as recited in claim 19. Further, Heinonen also discloses wherein the telecommunications network is a wireless network (Col. 1, lines 38-41 and col. 12, lines 22-36).

Claim 21: Heinonen and Jonstromer disclose a method as recited in claim 20. Further, Heinonen also discloses wherein the messages are integrated with the Short Message Service (SMS) channel of said telecommunications network (Col. 8, lines 12-42, col. 9, lines 50-64 and col. 1, lines 49-56).

Claim 22: Heinonen and Jonstromer disclose a method as recited in claim 19. Heinonen does not explicitly disclose sending a result message which includes a second cryptographic signature over said telecommunications network to said payment server computer for confirmation, whereby said merchant server computer may be informed of said confirmation and release said item to said user. Jonstromer further discloses sending a result message which includes a second cryptographic signature over said telecommunications network to said payment server computer for confirmation, whereby said merchant server computer may be informed of said confirmation and release said item to said user (Page 1, line 24-page 2, line 8, page 8, lines 25-32, page 13, line 31-page 14, line 9, and page 16, line 13-page 17, line 22). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to include such steps in the Heinonen's invention. One would have been motivated to use such steps in order to increase the system security.

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*Conclusion*

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Exr. Pedro R. Kanof whose telephone number is (703) 308-9552. The examiner can normally be reached on weekdays from 7:30 a.m. to 4:00 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Vincent Millin, can be reached on (703) 308-1065. The fax phone number for this Group is (703) 308-1396.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-3900.

PRK-5/31/2001.

  
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